

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the foregoing amendments and the following remarks.

By the foregoing amendment, claims 1, 6 and 7 have been amended. No new matter is believed to have been added. Thus, claims 1, 2, 6, and 7 are pending in the present application, of which claims 1 and 6 are independent.

Claim Rejection Under 35 U.S.C. §112

Claims 1-2 and 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. By the foregoing amendments, the claims have been amended to more particularly and distinctly claim the subject matter. To be more specific, "preformed" as found in the dependent claim 1 and "ach" as found in the dependent claim 6 have been corrected. Accordingly, withdrawal of the rejection is respectfully requested.

Claim Rejection Under 35 U.S.C. §102

Claims 1-2 and 6-7 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by Unigraphics Solutions™ ("User's Guide Getting Started with SOLID EDGE™ Ver. 8.0").

INDEPENDENT CLAIM 1

Independent claim 1 has been amended to clarify the subject matter and clearly distinguish it over Unigraphics Solutions™.

In the conventional three-dimensional CAD system including Unigraphics Solutions™, each set of data (part information) is generated and assigned to each of parts that constitute an assembly model. The each set of data, for example, includes constitutional data, and data for a position and a posture based on a coordinate system of each of the parts. For example, an assembly model A is formed of a part B and a part C. The assembly model A has its own coordinate system A1, the part B has its own coordinate system B1, and the part C has its own coordinate system C1. When the assembly model A is projected to generate the data for part B, the data includes, as attribute of the part B, an identity of the parent model (in this case, the assembly model A), an identity of the projected model (in this case, the part B), a point of origin of projected part B (in the coordinate system B1), and a line of sight in the coordinate system B1.

Now, it is assumed that the part B is modified and a partial projection is performed by loading the modified part B. The data for part B, i.e., the attribute of the part B, for example, is unable to indicate where the part B (modified part B) was originally located in the coordinate system A, in which direction the part B was viewed in the coordinate system A, how the part B was related with other parts in the coordinate system A. In this way, in the conventional three-dimensional CAD system including Unigraphics Solutions™, it is impossible to accurately reflect a change of the part B in the assembly model.

In contrast, as an example, independent claim 1 recites among other things a feature of:

adding the part information to the part group when said grouping is performed for each of the plurality of parts, the part information including a part name, **a part line of sight of a part which is obtained by converting an original line of sight held in the three-dimensional assembly model based on the coordinate system of the three-dimensional assembly model into the line of sight of the part based on coordinates system of the part, and a part position based on the coordinate system of the three-dimensional assembly model**" (emphasis added).

With this arrangement, as compared with Unigraphics Solutions™, the following feature is realized in the claimed invention.

leaving the three-dimensional assembly model unloaded and **loading, as a target for a partial reprojection, only a modified three-dimensional part model** of a part of which a shape has been modified among the plurality of parts;

deciding a line of sight for performing partial reprojection applicable to the modified three-dimensional part model thus loaded **based on the part line of sight included in the part information** of the part whose modified three-dimensional part model is to be subjected to the partial reprojection;

deciding, in the two-dimensional projection of the assembly model, **a generating position** in which two-dimensional elements of the modified three-dimensional part model are to be generated **based on the part position that is based on the coordinate system of the three-dimensional assembly model** and included in the part information of the part whose modified three-dimensional part model is to be subjected to the partial reprojection; and

performing, based on the line of sight for performing partial reprojection and the generating position thus decided,

the partial reprojection of the modified three-dimensional part model, and generating a modified version of the two-dimensional projection of the assembly model by reflecting the shape that has been changed" (emphasis added).

The Office Action cited "Annotations and Associativity" on page 296, "Setting Projection Angle" (for line of sight) on page 269, "When you change parts and assemblies in part views, you can easily update the views so they match the new model geometry" on page 280, and "Drawing views for Parts in Assemblies on pages 231 and 258" on pages 278-279 of Unigraphics Solutions™.

However, "Annotations and Associativity" in Unigraphics Solutions™ describes that annotations can be associative or non-associative with an element it is connected to. "Setting Projection Angle" describes that a user can set the projection angle dependent on the Mechanical drafting standard. "When you change parts and assemblies in part views, you can easily update the views so they match the new model geometry" describes that a part, when changed, can be viewed because part views are associative to the 3-D part of assembly they were created from, and shows part-to-part illustrations. "Drawing View Manipulation" on pages 278-279 describes that the view can be scaled, cropped, rotated, and so on. "Changing Parts in Assemblies" on page 231 describes that you can construct, edit, or delete features on a Solid Edge part within the context of the assembly. None of the cited sections explicitly or implicitly disclose "adding the part information to the part group when said grouping is performed for each of the plurality of parts, the part information including a part name, **a part line of sight of a part which is obtained by converting an original line of sight held in the three-dimensional assembly model based on the coordinate system of the three-dimensional assembly model into the line of sight of the part based on coordinates system of the part, and a part position based on the coordinate system of the three-dimensional assembly model**" of the features recited in claim 1, because technology of Unigraphics Solutions™ belongs to the conventional three-dimensional CAD system discussed at the outset.

Therefore, Unigraphics Solutions™ fails to teach the features recited in claim 1 as discussed above.

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. In view of the distinction of claim 1 noted above, at least the elements described above are not present in Unigraphics

SolutionsTM. Hence, Unigraphics SolutionsTM does not anticipate claim 1.

In view of the foregoing discussion, the rejection of claim 1 is improper. Accordingly, withdrawal of the rejection is respectfully requested.

INDEPENDENT CLAIM 6

Independent claim 6 has been amended so as to clarify the subject matter and clearly distinguish it over Unigraphics SolutionsTM.

It is alleged that claim 6 is rejected since Unigraphics SolutionsTM is directed to a computer-readable medium storing a program for a three-dimensional CAD system that enables reflection of a shape modified in a part model on a two-dimensional projection generated from an assembly model, the program causing a computer to perform the method steps of claim 1, and is therefore rejected under the same prior art.

For this reason of rejection, it is assumed that each and every feature of independent claim 6 is read on the same section in Unigraphics as applied in the rejection of claim 1. Accordingly, the same argument as applied to the rejection of independent claim 1 is also applied to the rejection of independent claim 6.

Therefore, anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. In view of the distinction of claim 6 noted above, at least the elements described above are not present in Unigraphics SolutionsTM. Hence, Unigraphics SolutionsTM does not anticipate claim 6.

In view of the foregoing discussion, the rejection of claim 6 is improper. Accordingly, withdrawal of the rejection is respectfully requested.

DEPENDENT CLAIM 2

Claim 2 depends from independent claim 1. A basis for how Unigraphics SolutionsTM is deficient vis-à-vis claim 1 has been discussed above. Hence, dependent claim 2 is patentable at least for the same reasons as discussed above with respect to claim 1.

In view of the foregoing discussion, the rejection of claim 2 is improper. Accordingly, withdrawal of the rejection is respectfully requested.

DEPENDENT CLAIM 7

Claim 7 depends from independent claim 6. A basis for how Unigraphics SolutionsTM is deficient vis-à-vis claim 6 has been discussed above. Hence, dependent claim 7 is patentable at least for the same reasons as discussed above with respect to claim 6.

In view of the foregoing discussion, the rejection of claim 7 is improper. Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, this application is considered to be in immediate condition for allowance, and thus, reconsideration and a Notice of Allowance are courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephonically contact the undersigned to attend to such matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,
STAAS & HALSEY LLP

/Mehdi D. Sheikerz/

Date: _____ March 12, 2010 _____

By: _____
Mehdi D. Sheikerz
Registration No. 41,307

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501